



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/511,375

10/14/2004

Jean-Pierre Boisseau

825-02-584

8694

7590

04/11/2006

Leo H McCormick Jr
Bosch Braking Systems
401 N bendix Drive
P O Box 4001
South Bend, IN 46634-4001

EXAMINER

SY, MARIANO ONG

ART UNIT

PAPER NUMBER

3683

DATE MAILED: 04/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/511,375	BOISSEAU, JEAN-PIERRE	
	Examiner	Art Unit	
	Mariano Sy	3683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 14,15,17 and 18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13,16 and 19-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/14/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's election of Specie A, figures 2 and 3, claims 1-13, 16, and 19-22 in the reply filed on January 31, 2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

3. The disclosure is objected to because of the following informalities:

page 9, line 6 "pad 6" should be --pad 4--,

page 9, line 8 "pad 6" should be --pad 4--,

page 9, line 23 "half-sphere 38' " should be --half-sphere 28'--,

page 11, line 12 "half-sphere 30" should be --half-sphere 28'--,

page 18, line 34 "fourth embodiment" should be --third embodiment--.

Appropriate correction is required.

Drawings

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "columns 16" on page 8, line 21. Corrected drawing sheets in compliance

Art Unit: 3683

with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "motor M1" on page 18, line 5 and "motor M2" on page 18, line 20.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Art Unit: 3683

6. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "axis y' " on page 19, line 7 and line 20. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

7. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: "5" in Fig. 1. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the

examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1-13, 16, and 19-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the inclination" in lines 12-13. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the bearing surface" in lines 13-14. There is insufficient antecedent basis for this limitation in the claim.

Claim 2 recites the limitation "make it possible" in line 2. It is indefinite and unclear if it is included or precluded.

Claim 2 recites the limitation "the plane" in line 3. It is unclear which plane in claim 1 (line 13 and line 15) that applicant is referring to.

Claim 3 recites the limitation "the first means" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites the limitation "the brake disk" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites the limitation "the piston" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites the limitation "the first end" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claims 8-11 are indefinite due to their dependency on claim 7.

Claim 13 recites the limitation "the braking force amplifier means" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 16 recites the limitation "make it possible" in line 2. It is indefinite and unclear if it is included or precluded.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1-3 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Evans (US 3,809,190).

Re-claims 1, 2, and 16 Evans disclosed, as shown in fig. 1-4, a brake device for a vehicle including a friction first element 18 having a first face pressed against a first face of a second element (rotor) 12 secured to a wheel or the vehicle, and an application third element 35 for applying a braking force bearing via a first end against a second face of the friction first element that is opposite from the first face of the friction

Art Unit: 3683

first element and for pressing the friction first element against the second element (rotor), said brake device also including amplifier means 32 for modifying an inclination of a tiltable plane containing a bearing surface between the friction first element and the application third element relative to a plane containing the first face of the second element (rotor).

Re-claim 3 Evans disclosed wherein the friction first element constitute a brake pad having a rigid support carrying the second face and a lining provided with the first face for coming in contact with the second element (rotor), and wherein the third element includes a piston provided with the first face in contact with the second face of the rigid support via the amplifier means and a braking force generator 62 for applying a braking force to the piston.

12. Claims 1-3, 5, 12, 13, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Karnopp et al. (US 4,852,699).

Re-claims 1, 2, and 16 Karnopp et al. disclosed, as shown in fig. 1-5, a brake device for a vehicle including a friction first element 11 having a first face pressed against a first face of a second element (rotor) 10 secured to a wheel or the vehicle, and an application third element 35 for applying a braking force bearing via a first end against a second face of the friction first element that is opposite from the first face of the friction first element and for pressing the friction first element against the second element (rotor), said brake device also including amplifier means 33, 34 for modifying an inclination of a tiltable plane containing a bearing surface between the friction first

Art Unit: 3683

element and the application third element relative to a plane containing the first face of the second element (rotor).

Re-claims 3 and 5 Karnopp et al. disclosed wherein the friction first element constitute a brake pad having a rigid support carrying the second face and a lining provided with the first face for coming in contact with the second element (rotor), and wherein the third element includes a piston provided with the first face in contact with the second face of the rigid support via the amplifier means and a braking force generator (motor) 28 for applying a braking force to the piston.

Re-claim 12 Karnopp et al. disclosed wherein the amplifier means are activated by an electric motor 28.

Re-claim 13 Karnopp et al. disclosed also including a parking brake mechanism co-operating with the amplifier means so that the tiltable plane is tilted in the same direction as the gradient on which the vehicle is parked.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 4, 6, and 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karnopp et al. in view of Akita et al. (US 5,75,782).

Re-claims 4, 6, and 19-22 Karnopp et al. failed to disclose wherein the braking force generator is a master cylinder or a hydraulic motor and a brake system having a computer, detection means for detecting when brake control is actuated, and detection means for detecting the speed of at least one wheel and the amplifier means is controlled by the computer.

Akita et al. teaches, as shown in fig. 1, the use of the known braking force generator is a master cylinder or a hydraulic motor and a brake system having a computer, detection means for detecting when brake control is actuated, and detection means for detecting the speed of at least one wheel and the amplifier means is controlled by the computer.

It would have been obvious to one of ordinary skill in the art to modify the brake device of Karnopp et al. with the use of a master cylinder and a hydraulic motor and a brake system having a computer, detection means for detecting when brake control is actuated, and detection means for detecting the speed of at least one wheel and the amplifier means is controlled by the computer, as taught by Akita et al., as a mere choice of known equivalent braking device with the same intended function of braking a vehicle.

15. Claim 7 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Evans	(US 3,662,864)
Guettier	(US 3,850,268)
Burgdorf	(US 4,375,250)
Ohta et al.	(US 4,602,702)
Schumann	(US 6,305,508)
Dietrich et al.	(US 6,318,513)
Schaffer	(US 6,340,077)
Trinh	(US 6,932,198)

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mariano Sy whose telephone number is 571-272-7126. The examiner can normally be reached on Mon.-Fri. from 8:30 A.M. to 2:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James McClellan, can be reached on 571-272-6786. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

Application/Control Number: 10/511,375

Page 11

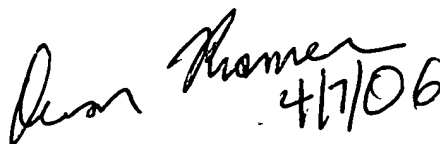
Art Unit: 3683

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



M. Sy

April 4, 2006


4/7/06
DEVON C. KEANE
PATENT EXAMINER